

12 **EUROPEAN PATENT APPLICATION**

21 Application number: 84307939.3

61 Int. Cl.⁴: **F 24 D 19/10**

22 Date of filing: 15.11.84

30 Priority: 19.12.83 GB 8333730

43 Date of publication of application:
26.06.85 Bulletin 85/26

88 Date of deferred publication of search report: 12.03.86

84 Designated Contracting States:
BE DE FR IT NL

71 Applicant: **British Gas Corporation**
Rivermill House 152 Grosvenor Road
London SW1V 3JL(GB)

72 Inventor: **Royston, George Dann**
64 Brook Road South
Brentford Middlesex TW8 0PH(GB)

74 Representative: **Morgan, David James**
British Gas Corporation Patents Department 326 High
Holborn
London WC1V 7PT(GB)

54 **Control of a central heating system.**

57 The present invention relates to the control of a central heating system.

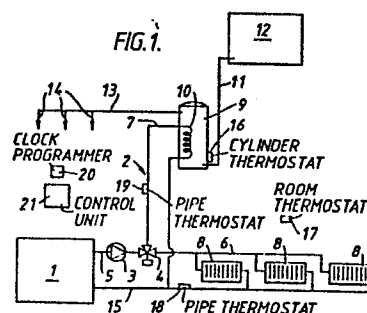
The system includes a condensing boiler 1, a pump 3 operable to pump hot flow water leaving the boiler 1 around a circuit having two branches 6 and 7 and an electrically operated diverter valve 4 operable to direct the flow water to flow into one or other of the branches.

The branch 6 includes radiators 8 to provide space heating by release of heat from the flow water and the branch 7 includes a calorifier 10 for heating water stored in a cylinder 9.

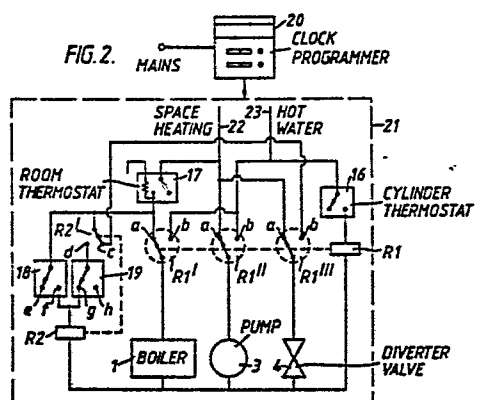
The control unit includes a cylinder thermostat 16, a room thermostat 17 and two pipe thermostats 18 and 19. The thermostat 18 is mounted on the pipework in the space heating branch 6 downstream of the radiators 8 and the thermostat 19 is mounted on the pipework in the hot water branch 7 upstream of the cylinder 9.

When both hot water and space heating are required the boiler is operated and hot water is directed by the valve 4 to flow into the space heating branch 6 until the water reaches a preset level at the point where the thermostat 18 is mounted. At this stage the thermostat 18 switches from position e to f and the valve 4 directs the water to flow into the hot water branch 7. When the water temperature reaches a higher preset level at the point where the thermostat 19 is mounted it switches from position g to h. If thermostat 18 has switched

back to position e because the temperature of the water at the thermostat 18 has fallen to below its preset level, the valve 4 directs the water to flow into the branch 6. The process is then repeated.



./...





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	DE-C-1 222 221 (BUDERUS' SCHE EISENWERKE) * Whole document *	1,2,7,8	F 24 D 19/10
A	--- FR-A-2 270 528 (BURNHAM EUROPA) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			F 24 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11-12-1985	Examiner VAN GESTEL H.M.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	